



EL DORADO ENGINEERING

Designers / Consultants | 9089 So. 1300 West, Suite 150, West Jordan, UT 84088 | 801-966-8288

General Services Administration

Multiple Award Schedule (MAS)

Class: Contract

Number: 47QRAA18D00E6

For more information on ordering from Federal Supply Schedules
click on the FSS Schedules button at <http://www.gsa.gov/schedules-ordering>

Contract Period: August 15, 2018 – August 14, 2023

Contractor: El Dorado Engineering, Inc.
9089 South 1300 West, Suite 150
West Jordan, UT 84088

Business Size: Small Business

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Contract Administration: Rick O Frandsen

CUSTOMER INFORMATION:

1a. Table of Awarded Special Item Number(s) with descriptions:

SIN	SIN Description
541330ENG	Engineering Services
541380	Testing Laboratory Services
541420	Engineering System Design and Integration Services
541620	Environmental Consulting Services
541715	Engineering Research and Development and Strategic Planning Services
562112	Hazardous Waste Disposal Services
562910REM	Environmental Remediation Services
OLM	Order-Level Materials

- 1b. Identification of the lowest priced model number and lowest unit price for that model for each special item number awarded in the contract. This price is the Government price based on a unit of one, exclusive of any quantity/dollar volume, prompt payment, or any other concession affecting price. Those contracts that have unit prices based on the geographic location of the customer, should show the range of the lowest price, and cite the areas to which the prices apply.**
- 1c. If the Contractor is proposing hourly rates a description of all corresponding commercial job titles, experience, functional responsibility and education for those types of employees or subcontractors who will perform services shall be provided. If hourly rates are not applicable, indicate "Not applicable" for this item.**
- 2. Maximum Order:** \$1,000,000.00
- 3. Minimum Order:** \$100.00
- 4. Geographic Coverage (delivery Area):** Domestic Only
- 5. Point(s) of production (city, county, and state or foreign country):** Same as company address
- 6. Discount from list prices or statement of net price:** Government net prices (discounts already deducted).
- 7. Quantity discounts:** 0.5% off \$250,000 or more
- 8. Prompt payment terms:** Net 30 days
- 9a. Notification that Government purchase cards are accepted up to the micro-purchase threshold:** Yes
- 9b. Notification whether Government purchase cards are accepted or not accepted above the micro-purchase threshold:** will accept over \$3,000
- 10. Foreign items (list items by country of origin):** None
- 11a. Time of Delivery (Contractor insert number of days):** Specified on the Task Order
- 11b. Expedited Delivery.** The Contractor will insert the sentence "Items available for expedited delivery are noted in this price list." under this heading. The Contractor may use a symbol of its choosing to highlight items in its price list that have expedited delivery: Contact Contractor
- 11c. Overnight and 2-day delivery.** The Contractor will indicate whether overnight and 2-day delivery are available. Also, the Contractor will indicate that the schedule customer may contact the Contractor for rates for overnight and 2-day delivery: Contact Contractor

- 11d. Urgent Requirements.** The Contractor will note in its price list the “Urgent Requirements” clause of its contract and advise agencies that they can also contact the Contractor’s representative to effect a faster delivery: Contact Contractor
- 12. F.O.B Points(s):** Destination
- 13a. Ordering Address(es):** Same as Contractor
- 13b. Ordering procedures:** For supplies and services, the ordering procedures, information on Blanket Purchase Agreements (BPA’s), and a sample BPA can be found at the GSA/FSS Schedule homepage (fss.gsa.gov/schedules).
- 14. Payment address(es):** Same as company address
- 15. Warranty provision.:** Contractor’s standard commercial warranty.
- 16. Export Packing Charges (if applicable):** N/A
- 17. Terms and conditions of Government purchase card acceptance (any thresholds above the micro-purchase level):** Contact Contractor
- 18. Terms and conditions of rental, maintenance, and repair (if applicable):** N/A
- 19. Terms and conditions of installation (if applicable):** N/A
- 20. Terms and conditions of repair parts indicating date of parts price lists and any discounts from list prices (if applicable):** N/A
- 20a. Terms and conditions for any other services (if applicable):** N/A
- 21. List of service and distribution points (if applicable):** N/A
- 22. List of participating dealers (if applicable):** N/A
- 23. Preventive maintenance (if applicable):** N/A
- 24a. Environmental attributes, e.g., recycled content, energy efficiency, and/or reduced pollutants:** N/A
- 24b. If applicable, indicate that Section 508 compliance information is available on Electronic and Information Technology (EIT) supplies and services and show where full details can be found (e.g. contractor’s website or other location.) The EIT standards can be found at:** www.Section508.gov/.
- 25. Data Universal Numbering System (DUNS) number:** 047478276
- 26. Notification regarding registration in Central Contractor Registration (CCR) database:** Registered
- 27. Final Pricing:**
The rates shown below include the Industrial Funding Fee (IFF) of 0.75%.

Labor Categories Pricing

Item	Awarded Labor Category	Site	IFF included
1	Principal/Program Manager (PR)	Both	\$174.56
2	Project Manager (PM)	Both	\$149.62
3	Engineer 4/Senior Engineer (E4)	Both	\$154.61
4	Engineer 3/Staff Engineer (E3)	Both	\$129.67
5	Engineer 2/Journeyman Engineer (E2)	Both	\$95.00
6	Equipment Specialist (EQS) *	Both	\$119.70*
7	Senior Designer/Draftsman (TL3) *	Both	\$75.00*
8	Staff Designer/Draftsman (TL2)	Both	\$69.82
9	Engineer in Training (E1)	Both	\$39.90

Note: (*) Labor categories will hold pricing thru year three (year 3). However, the firm has a CPL the firm will need to submit a modification to increase prices. Once the price modification is approved, pricing will be adjusted.

Service Contract Act: The Service Contract Act (SCA) is applicable to this contract as it applies to the entire Professional Services Schedule (PSS) Schedule and all services provided. While no specific labor categories have been identified as being subject to SCA due to exemptions for professional employees (FAR 22.1101, 22.1102 and 29 CFR 541.300), this contract still maintains the provisions and protections for SCA eligible labor categories. If and / or when the contractor adds SCA labor categories / employees to the contract through the modification process, the contractor must inform the Contracting Officer and establish a SCA matrix identifying the GSA labor category titles, the occupational code, SCA labor category titles and the applicable WD number. Failure to do so may result in cancellation of the contract.

Labor Category Descriptions

PR Principal/ Program Manager

Company principals, i.e., President or Vice President or Program Manager

Degreed professional that manages complex programs. Qualifications include at least one of the following:

- BS Degree in Engineering AND Registered Professional Engineer + 12 yrs. experience
- MS Degree in Engineering +10 yrs. experience
- PhD Degree in Engineering AND 8 yrs. experience

Duties: Manage programs, with responsibility for coordinating resources between multiple projects; represent EDE at conferences, and in business negotiations and business development

PM Project Manager

Professional that manages complex design and installation projects. Qualifications include at least one of the following:

- BS Degree in Engineering + 8 yrs. experience AND 4 yrs. experience as lead project engineer or lead field engineer
- 20 yrs. experience with design, installation, construction, supervision, or project management of relevant equipment, systems, or projects

Duties: Perform oversight of complex installations for both design build projects and construction management projects; perform oversight of complex fabrications of equipment and fixtures

E4 Engineer 4/Senior Engineer

Qualifications include at least one of the following:

- BS Degree in Engineering AND Registered Professional Engineer + 10 yrs. experience
- MS Degree in Engineering + 10 yrs. experience
- BS Degree in Engineering + 15 yrs. experience

Duties: Serve as Project Engineer on complex engineering projects; oversee the work of other engineers; act as liaison of technical information with clients

E3 Engineer 3/Staff Engineer

Qualifications include at least one of the following:

- BS Degree in Engineering AND Registered Professional Engineer + 5 yrs. experience
- MS Degree in Engineering + 5 yrs. experience
- BS Degree in Engineering + 8 yrs. experience

Duties: Perform complex and technical engineering assignments; generally works under the direction of the Program Manager or Project Engineer with minimal oversight

E2 Engineer 2/Journeyman Engineer

Qualifications:

BS Degree in Engineering + 0 yrs. experience

Duties: Perform engineering assignments under the direction of the Program Manager or Project Engineer

EQS Equipment Specialist

Qualifications:

- Associates Degree or Professional Technical License + 15 yrs. electro/mechanical construction and maintenance experience

Duties: Perform onsite installations of complex projects under the direction of the Program Manager or Project Manager; perform electrical PLC programming and electrical panel layout and construction

TL3 Senior Designer/Draftsman

Qualifications:

- Associates Degree + 10 yrs. Experience

Duties: Manage the drafting and modeling of complex projects under the direction of Engineers

TL2 Staff Designer/Draftsman

Qualifications:

- Associates Degree (or equivalent from Technical College) + 5 yrs. Experience

Duties: Perform drafting and modeling assignments under the direction of Engineers or Senior Designer/Draftsmen

E1 Engineer or Technician in Training

Qualifications:

- Associates Degree (or equivalent from Technical College)/concurrent enrollment + 0 yrs. Experience

Duties: Assist Engineers/Professionals with tasks and assignments; help with research and technical information review



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CAPABILITIES AND EXPERIENCE

INTRODUCTION

El Dorado Engineering, Inc. (EDE) is a high technology design and consulting engineering firm with extensive capabilities in mechanical, chemical, electrical, and controls engineering. We are an employee-owned small business with the flexibility to meet the client needs.

Company personnel provide professional expertise in the areas of design, development, and provision of many types of facilities, processes, machines, and associated controls. EDE personnel have designed, built, and tested hundreds of pieces of equipment as well as designing and providing numerous turnkey system installations throughout the U.S. and internationally. EDE performs turnkey or design/build projects that include fabrication and construction as well as providing engineering and consulting services.

SPECIALIZED ENGINEERING SERVICES

In addition to traditional engineering expertise, EDE offers several areas of specialization, including:

- x Combustion, incineration, and thermal treatment Systems
- x Explosive and ordnance equipment design
- x Demilitarization equipment for chemical and conventional munitions
- x Hazardous waste treatment
- x Robotics and automation in hazardous environments
- x Safety and hazards analysis
- x Environmental permitting
- x Air emissions modeling
- x Pollution Control Systems
- x New technology development

EDE has extensive experience and expertise in providing equipment and facilities, and developing technology for the handling, containment, detection, disposal, and treatment of: explosives, ordnance, propellants, explosive contaminated soil, and related waste materials. EDE provides engineers, explosive specialists, and support staff for explosive and propellant related engineering operations. EDE is intimately familiar with both environmental and safety requirements regarding ordnance and explosive wastes. One of EDE's primary specialties is the development of equipment and systems for demilitarization of conventional and chemical munitions. EDE often uses our own extensive experience to develop "first of a kind" equipment and technology for

demilitarization, ranging from simple jigs and fixtures up through complete explosive waste incineration facilities and sophisticated automated equipment. EDE is a recognized leader in Explosive Waste Incineration technology and thermal treatment systems development including Contained Burning and Flashing Furnace technology. EDE has also developed extensive procedures for sampling, cleanup and closure of explosive contaminated facilities.

Combustion, Furnaces, Incineration, and Thermal Treatment

EDE personnel have extensive experience regarding the design and provision of combustion equipment and systems, including the development of low-NO_x burners, novel flare systems, and a wide variety of fired heating systems, furnaces, incinerators, and thermal treatment systems. EDE has designed, installed and permitted many hazardous waste incinerators located worldwide (See Figure 1). These incinerators are designed to meet all current regulations. EDE has designed liquid and solid feed devices, pollution control equipment, storage and ancillary support equipment. EDE has also designed, developed, and installed non-incineration thermal treatment processes that are not encumbered by incinerator regulations (See Figure 2). EDE has designed and provided transportable thermal treatment systems used at many U.S. military sites (See Figure 3).



Figure 1: EDE Explosive Waste Incinerator Facility, Belgium



Tactical Rocket Motor Contained Burn System



Waste PEP contained Burn System

Figure 2: Contained Burn Systems



Figure 3: Transportable Flashing Furnace

Explosives and Ordnance Equipment and Technologies

EDE has designed all types of equipment for machines and processes regarding explosives, propellants and ammunition. EDE specializes in the handling, containment, detection, disposal, and treatment of: explosives, ordnance, propellants, explosive contaminated soil, related waste, and hazardous waste materials. EDE provides engineers, explosives specialists, and support staff for explosive and propellant related engineering operations. EDE personnel have an intimate knowledge of past operations regarding explosives and chemicals at military installations throughout the U.S. EDE has been a prime contractor on major multi-million, multi-year task order chemical weapons destruction contracts with Huntsville Corps of Engineers and Tooele Army Depot.

EDE has designed all types of equipment and provided broad engineering support including environmental studies for chemical weapons demilitarization. EDE engineers

have played key roles in programs for disposal, clean up, decontamination, testing, surveillance, and maintenance of chemical and biological warfare items.

EDE is very experienced with various methods of disassembly and size reduction associated with the demilitarization (demil) or recycling of large rocket motors and munitions. EDE personnel have developed and tested shears, saws, punches, crushers, and other mechanical processes in order to access or remove explosives from munitions. EDE has also participated in a wide variety of non-mechanical extraction projects that include steamout, washout, drillout, hogout, cavijet, microwave meltout, and cryowashout.



Figure 4: Punch Shear Operations



Figure 5: Slug Out

Robotics and Automation

EDE has developed robotic systems and automation to enhance production and worker safety on a wide variety of processes. EDE is not a representative of any particular brand of robot. We employ competent robotic experts who are adept at robot applications and at customizing standard robotic systems and peripheral equipment interfaces into a total robotic package.

Safety

EDE has provided clients with hazards analysis and risk assessment services for processes, procedures, and equipment. EDE engineers are accustomed to working with all DOD safety manuals including AMCR 385-100 (Army Safety) OP-5 (Navy Safety) and AFM 127-100 (Air Force Safety). The EDE staff are contributing authors to MIL-STD-398, the Health and Safety Manual for munitions facilities.

Environmental Permitting

EDE has provided RCRA Part A & Part B permit applications for clients throughout the U.S. These have been for storage, treatment and incineration facilities including Subpart X open burning. EDE has also prepared air permit and PSD permit applications, RCRA closure plans, and subpart J, tank assessments.

EDE has direct experience in virtually all aspects of RCRA and CERCLA/SARA implementation, including facility assessments, remedial investigations, feasibility studies, remedial design, construction, operation and maintenance programs, and related NEPA documentation, including EA's and EIS's

EDE has broad base experience with applicable federal and state regulations, having performed services regarding hazardous waste in virtually every section of the U.S. EDE has worked with the major explosive and propellant industries including Aerojet, Thiokol, United Technologies, Hercules, Honeywell, DuPont, Rockwell, Martin Marietta, Atlantic Research Corp., Tracor, Dyno Nobel, NASA, U.S. Army, U.S. Navy, and the U.S. Air Force in the assistance of permit preparation and environmental assessments regarding explosives and propellants.

Hazardous Waste Treatment

EDE hazardous material experience includes: PCB's, PCP's, dioxins, furans, nerve agents, phosgenes, solvents, halogens, heavy metals, flammables, explosives, white phosphorus, Napalm, smokes, dyes, pyrotechnics, carcinogens, organotin paints, low level radioactive wastes, acids and corrosives, toxics, solids, liquids, and gases. Our experience includes the preparation of closure plans for military installations, requiring Department of Defense Explosive Safety Board (DDESB) approval. EDE personnel also served on a joint services panel that surveyed Department of Defense military installations regarding explosive and chemical agent disposal operations and the impact of environmental regulations on these operations.

Air Emissions Modeling

EDE has developed and validated a proprietary computer air model for open burning of explosives and static firing of rocket motors that is widely accepted in permitting these activities (See Figure 6).



Figure 6: EDE emissions and air modeling validation test, static firing Pershing rocket motor

Pollution Control Systems

EDE personnel have extensive experience with the design and development of both wet and dry air pollution control systems, including the design of secondary combustion chambers (afterburners), cyclone particulate collectors, catalytic and non-catalytic NO_x reduction systems, baghouses, venturi scrubbers, packed bed scrubbers, HEPA filter systems, carbon filters, mercury removal systems, acid gas scrubbers, dioxin and furan removal, caustic injection systems, ammonia vaporizers and injection grids, low NO_x burners and combustion techniques, heat exchangers, fans, and all associated controls.

Our recent turnkey hazardous waste incinerator installed in Belgium easily met all of the most stringent EU requirements and was declared to be the cleanest incinerator of this type in all of Europe. The large scale contained burn system provided at Camp Minden, Louisiana, safely achieved throughput rates much higher than any previous energetics disposal facility (>15.6 million lbs in less than one year), while achieving emission rates at or below ambient levels, with EPA approved stack testing demonstrating less than 0.01 ppm of criteria pollutants (CO, NO_x, THC) and non-detect of all hazardous constituents. This installation represents the lowest emissions achieved in the world for a facility of this type, which is particularly challenging given the high nitrogen content of the explosive materials in the workload.



Figure 7: Camp Minden Contained Burn Facility

New Technology Development

EDE has worked on developing and demonstrating several novel technologies, such as: microwave meltout of explosives from bombs for explosives recycling, induction heating meltout of explosives for recycling, and wash out and recovery of magnesium from illuminating flares for reuse.

EDE has pioneered and fielded new technologies for treating explosive wastes including Transportable Flashing Furnace technology (Figure 3) and Contained Burn technology (Figures 2 & 7). The Camp Minden facility was an especially challenging project as this first of a kind facility was designed, fabricated, installed, and commissioned in less than 9 months due to an aggressive project schedule to provide this system as an emergency response for safe disposal of unstable explosive materials.

EDE personnel have extensive experience with most of the new technologies that have been researched and developed for application in the demil sector over the last 40 years. Thus, EDE has a unique perspective in understanding what works and, probably more importantly, what does not work from a technical and economic perspective. EDE has firsthand experience in recognizing technologies that can be successfully applied as well as recognizing foreseeable challenges associated with many new technologies.

TRADITIONAL ENGINEERING SERVICES

Machine Design. EDE has designed all types of machines and systems ranging from simple tool modifications to complex highly automated processes.

Hydraulics, Pneumatics, Fluidics, Electronics. EDE personnel have experience in designing machines that operate on hydraulic, pneumatic, or electric power.

Chemical Process Equipment. EDE has a wide range of process plant experience including design of hazardous waste incinerators, pollution control equipment, and a wide variety of chemical plant processes including liquid nitrogen manufacturing and distribution.

Automation and Controls. EDE possesses experience with microprocessors, digital sequencers, and standard analog controls coupled with instrumentation for the recording/controlling of precision automated equipment. Experience with video systems, infrared and ultraviolet sensor systems, and special audio systems are available. EDE designs and fabricates a wide range of control panels in-house, from simple push button controls to large motor control centers (MCCs). EDE also possesses in-house capabilities for PLC programming and advanced HMI systems.

Material Handling. Designs for standard and specialized materials handling and conveying equipment have been developed, fabricated and installed utilizing all types of indexing and transfer mechanisms.

Lighting and Power. EDE personnel have had experience in the layout of lighting and industrial power distribution systems, both single and three phase.

HVAC. EDE has performed design development and installation of HVAC systems for all size buildings, dams, power plants, computer centers, and environmental test chambers.

Strength of Materials and Selection. EDE can select required materials based on desired properties, strength, and corrosion resistance and fatigue analyses. EDE personnel have completed designs for high temperature and severely corrosive environments.

Utility Development. EDE has performed all types of utility designs including waste fired boilers, as well as steam, heat, and electrical distribution. EDE provided the electrical design for the development of the Utilidor system for Barrow Point, Alaska.

Water Treatment. EDE has provided several engineering designs for water treatment projects ranging in size from a water cooling tower filtration facility required to handle 400,000 gpm for a DOE gaseous diffusion plant in Kentucky, to a 25 gpm recycling, filtration and deionization facility in California, and a small batch treatment system for metal finishing operations in Utah.

Economic, Energy and Feasibility Studies. EDE has performed several studies for energy conservation, economic analyses, and waste to fuel studies, feasibility and optimization studies.



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ENVIRONMENTAL AND HAZARDOUS WASTE CAPABILITIES

El Dorado Engineering, Inc. (EDE) is a high technology, small business firm with vast experience in environmental and HTRW (Hazardous Toxic and Radioactive Wastes) projects. EDE has performed major studies, design, permitting, and construction of hazardous waste and hazardous material storage, treatment, and disposal facilities, and closure and cleanup operations. This experience includes air, water, and soil sampling, and emissions control. EDE is highly cognizant of associated regulations.

EDE has prepared major Resource Conservation and Recovery Act (RCRA) permits throughout the U.S., and has direct experience in virtually all aspects of RCRA and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)/Superfund Amendments and Reauthorization Act (SARA) implementation. This includes facility assessments, remedial investigations, feasibility studies, remedial design, and closures, along with the related construction, operation, and maintenance programs, and related National Environmental Policy Act (NEPA) documentation, including Environmental Assessments (EA) and Environmental Impact Statements (EIS).

EDE has broad-base experience with applicable federal and state regulations, having performed services regarding environmental issues in virtually every EPA region of the U.S. for private clients, as well as DOE, NASA, U.S. Army, Navy and Air Force. EDE provides environmental management services, including contingency plans, inspection plans, and sampling and training plans for air, wastewater, and groundwater pollution.

EDE hazardous material and waste experience includes PCB's, PCP's, dioxins, furans, nerve agents, phosgene, solvents, halogens, heavy metals, flammables, explosives, white phosphorus, napalm, smokes, dyes, pyrotechnics, carcinogens, organotin paints, low-level radioactive wastes, acids and corrosives, toxics, solids, liquids, and gases. EDE has also designed and installed air pollution control systems for incinerating chemicals and munitions. EDE's experience is not limited to the preparation of permit applications and environmental and NEPA studies, but also includes the preparation of contract specifications and Standard Operating Procedures for waste handling and treatment or facility closure, including demolition and reseeded.

RCRA Permitting

EDE has prepared RCRA permitting for major government installations throughout the U.S. This has included "nerve gas" disposal facilities, as well as hazardous waste incinerators requiring trial burn plans. This has included the fully developed closure and post closure plans for hazardous waste facilities. EDE has also performed RCRA permitting for large, non-government companies.

EDE has prepared a large number of RCRA Subpart X permit applications for open burning complete with air modeling and risk assessments. Our clients were some of the first companies to receive a Subpart X permit in the U.S.

EDE has used a proprietary air emission and dispersion model, the Products of Combustion/Atmospheric Dispersion (PCAD) computer model, for the RCRA Part B permit applications for numerous facilities. EDE has also used EPA models.

EDE has prepared design and closure plans and permits for hazardous waste lagoons including the first Part B application in the U.S.

Waste Characterization

EDE has performed a number of waste characterization studies, including surveying and categorizing all waste prior to treatment or disposal. Perhaps the largest study of this nature was the work EDE performed at a major chemical superfund site. EDE developed specifications for the incineration of soils contaminated with chemicals from past operations. As part of this study, EDE was required to examine the requirements of Solid Waste Assessment test programs.

Waste Treatment

EDE has developed several waste treatment plans. For many of these plans, EDE actually designed and installed the treatment equipment. These projects range in size from a waste water treatment/recycle facility for aircraft paint stripping where EDE designed and installed a system to clean paint and solvents from waste water for recycling, up to developing the specifications for incineration of contaminated soils at the Drake chemical superfund site, estimated at \$80,000,000.

Hazardous Waste Incinerators

One of EDE's primary specialties is incineration of hazardous wastes and materials, and the attendant pollution control equipment.

EDE is also experienced in the design of commercial hazardous waste incinerators, where developmental studies include a tradeoff analyses between a mobile incinerator, or a multi-incinerator complex. Design includes storage and unload facilities for solvents and other liquid wastes, and separate sludge handling facilities.

EDE has designed, fabricated, installed and operated rotary kiln incinerators throughout the world. These explosive waste incinerators are being used to destroy obsolete munitions and explosive wastes. The projects included turnkey services for feed systems, kilns, pollution abatement, controls and site construction.

EDE has constructed several explosive contaminated waste incineration systems (a carbottom incinerator), and a white phosphorus (WP) processing facility. This WP facility includes an incinerator in which the phosphorus oxide product is used to make phosphoric acid and

ultimately a fertilizer. EDE has designed all types of incinerators and feed systems including waste heat recovery systems and waste fuel systems.

EDE personnel have been on the Joint Services Department of Defense Panel where all the emerging incineration technology has been reviewed. We are familiar with air curtain destructors, rotary kilns, carbottom furnaces, fluidized bed incinerators and wet air oxidizers. EDE personnel served on a Department of Defense Panel for providing official DoD comments to EPA on the draft hazardous waste regulations prior to their final promulgation. EDE personnel served on a special Blue Ribbon Panel investigation of an incident involving open burning of smoke pots and resulted in civilian injury.

EDE has performed as a subcontractor in the review of a multi-million dollar Navy hazardous waste disposal facility at Indian Head, MD. EDE analyzed the fluidized bed incinerator and wet air oxidation processes for the disposal of waste and performed evaluations on packaging and DOT shipping requirements. EDE has also designed reactive and ignitable waste incineration facilities for private clients.

Environmental Assessments

EDE performed the risk assessment analysis or consolidating military operations. EDE is experienced in developing possible scenarios to analyze, including routine operations, as well as accidental incidents. This includes air emissions dispersion modeling, and soil and water impacts.

EDE provides on-site environmental audits/assessments to assist our clients in increasing their environmental compliance profile.

Air Permits and Pollution Control

EDE has assisted clients in obtaining all types of air permits including Title V and PSD permits. EDE has performed emission inventories, testing, modeling, design, and installing air pollution control systems through the world including real time air monitoring for RCRA permit compliance demonstration.

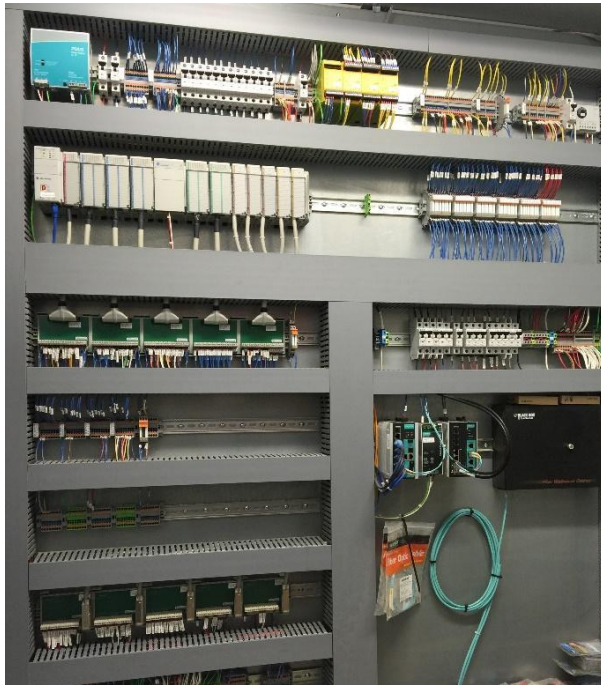
Hazardous Waste Training

EDE has provided on-site 40 hour HAZWOPER, annual RCRA refresher training, initial hazardous waste introduction courses and hazardous waste refresher training to both military installations and private industrial operations. EDE trained the entire workforce at Dugway Proving Ground that deals with waste material.



El Dorado Engineering

Statement of Qualifications for General Electrical Services



El Dorado Engineering
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El Dorado Engineering Inc.

Our Resources

El Dorado Engineering (EDE) has a wide variety of electrical expertise and experience. EDE has well experienced staff that have designed, built, tested, and installed electrical systems around the world. Our staff provides onsite training for use and maintenance of our systems. We also use software that enables remote access to aid in systemization, troubleshooting, and to allow for remote operations. Our electrical engineering services team includes:

- Electrical Engineers
- Mechanical Engineers
- Licensed Master Electrician
- General Electrical Contractor
- Controls Experts

Our Electrical Infrastructure Services

EDE draws from its 36 years of experience and technically capable employees to get the job done, no matter the size. We pride ourselves in doing quality work every time. Our staff has performed electrical work around the world, meeting the most stringent standards of the US and EU. Our decades of experience in hazardous environments have enabled us to provide reliable, safe services that meet our client's needs. Our primary capabilities and services in this area include:

- MCC Design and Fabrication
- Controls and Instrumentation
- Intrinsic Safe Wiring
- Hazardous Area Electrical Design
- Low Voltage Power Distribution (<600 V)
- Transformer/Sizing
- Switch Gear
- Communications
- SCADA
- Underground and Overhead Electrical
- Lightning Protection
- Mobile Generation Systems
- Lighting and Utility Design



Our Control Engineering Services

EDE provides custom control panels and control systems to meet and exceed customer expectations. Our experience over the past 36 years has solidified our expertise in this field. Our robust, clean, and organized control panels allow for ease of access, maintenance, and future additional control needs. Based on requirements, our panels can be used in hazardous environments where explosive dusts and hazardous substances are present. We can design from the ground up or help troubleshoot, provide schematics, and upgrade current systems. Our primary capabilities and services in this area include:

- Custom control panels (large, medium, and small)
- PLC, HMI, and DAS programming
- Control system retro-fit/upgrades
- Climate controlled and customized electrical shelters
- Electrical schematics for existing and new systems
- Provide complete turnkey services
- Large, medium, and small VFDs
- Built to UL and/or CE standards
- Robotics

Our History

EDE has produced high quality electrical engineering services and control panels since our inception in 1981. We are an employee owned small business, allowing for responsiveness and close individual attention for each job. We have provided services for all sized companies, from small, local business to multimillion dollar facilities around the nation and throughout the world.

Please visit our website at www.eldoradoengineering.com, or contact us at 801-966-8288 for further information or assistance.

